

Region 7 Underground Storage Tank Fact Sheet

Understanding the 1998 Requirements

U.S. EPA Region 7 Kansas City, KS

Winter 1998/1999

Leaking Underground Storage Tanks Are A Major Source Of Groundwater Contamination

Fifty percent of the nation's population uses groundwater for residential consumption for **drinking, cooking, washing, gardening, and farming**. Petroleum releases from Underground Storage Tanks (USTs) contaminate soils and groundwater and can threaten human health and safety, and the environment. To reduce the number of future spills and releases from USTs, the **EPA required all USTs to have spill, overfill and corrosion protection by December 22, 1998**. In order to prevent the serious environmental problems associated with groundwater contamination, the EPA will focus its efforts on the enforcement of these upgrade requirements. For the first six months, the EPA will direct its enforcement initiatives toward federal facilities; owner and operators of multiple or large UST facilities; and facilities that endanger sensitive ecosystems.

Background:

In September 1988, EPA gave all owners and operators 10 years to upgrade their UST systems to meet the requirements for spill, overfill and corrosion protection. By December 22, 1998, owners and operators of substandard USTs had to **replace, upgrade or close**.

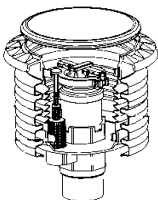
There is a total of 41,702 *active USTs* in Region 7's four states (Iowa, Kansas, Missouri, and Nebraska). In general, these USTs store petroleum-based products such as **motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils**. A small number of these USTs store hazardous substances. Besides the 1998 requirements, hazardous substance USTs must also comply with additional requirements.



USTs are found in such familiar locations as *gas stations, airports, school district bus barns, hospitals, automotive repair shops, private and public bus fleets, military bases, industrial plants, and fueling depots*.

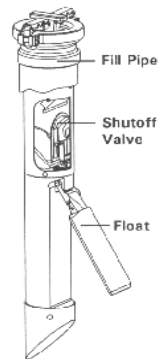
Upgrading Standards:

For **spill protection**, the equipment can be a spill basin (a bucket sealed around the fill pipe) to contain and drain any product that may spill when the delivery hose is detached from the fill pipe.



For **overfill protection**, three types of equipment can be used:

- an automatic shutoff valve that will restrict the flow of product in the tank when it is 95 percent full,
- a high-level alarm system that will alert the operator when the tank is 90 percent full, or
- a ball float valve at the vent pipe that will restrict vapor flowing out of the vent line, thus creating enough back pressure to restrict product flow into the tank.



For **corrosion protection**, UST systems must meet one of the following performance standards for new and existing tanks and piping:

- new tank and piping made of non-corrodible material, such as fiberglass,
- new tank and piping made of steel having a corrosion-resistant coating AND cathodic protection,
- new tank made of steel with a thick layer of non-corrodible material, such as ACT-100 tank,
- existing steel tank and piping systems with cathodic protection added,
- existing steel tank with an interior lining added and protected piping,
- existing steel tank with a combination of cathodic protection and interior lining and protected piping.

Issues:

1. Of 18,983 confirmed releases reported in Region 7 since the late 1980s, 8,726 cleanups have been completed.
2. Leaking USTs are potentially hazardous to human health and safety, and the environment. They pose serious fire and explosion hazards. **Annually, approximately 50 emergencies result from UST releases.** If not dealt with immediately, they can potentially lead to home and sewer explosions, deaths or serious injuries, and contamination of drinking water. Emergency response is costly and can exhaust both state and federal resources.
3. The UST regulations are not prescriptive; they allow for new and innovative technologies to achieve compliance with the UST upgrading requirements.
4. EPA has no intention of extending the December 22, 1998, deadline. In order to allow owners sufficient time to meet the deadline, EPA gave all UST owners 10 years to prepare, plan and complete the work.

Costs:

For an average 3-tank facility, the minimum cost to comply with Federal UST requirements is estimated to be \$45,000 for installing new USTs and piping; \$25,000 for the lining of tanks and replacement of piping; and \$15,000 for the addition of cathodic protection to the tanks and piping.



Financing Costs: Upgrading an existing tank or purchasing a new one can be a financial burden, especially for small and disadvantaged businesses. The U.S. Environmental Protection Agency has prepared a booklet, *Financing Underground Storage Tank Work: Federal and State assistance Programs* (EPA 510-b-95-010), to help UST owners and operators locate potential sources of financial assistance to cover the costs of upgrading, replacing, or closing an UST. The booklet describes 11 federal financial assistance programs which, while not designed specifically for UST work, do provide funding that owners and operators may be able to use for these activities. It also provides addresses and telephone numbers for potential sources of financial assistance in 14 states, including Iowa.

In addition, this booklet provides information on four federal programs that are available only to Indian tribes and/or individuals on reservations. These programs may assist Indian UST owners and operators in obtaining funding that might not be available from other sources. Three of these programs are administered by the Bureau of Indian Affairs, and one is administered by the Administration for Native Americans.

Information in this booklet is current as of the date of publication. However, funding for these programs is

subject to change. Please contact these programs directly to determine whether funding is available. To order copies of publications, call EPA's toll-free RCRA/Superfund Hotline at 800 424-9346. Or contact the National Clearinghouse for Environmental Publications and Information (NCEPI) via telephone, U.S. Mail, or the Internet. NCEPI's toll-free number is 800 490-9198; or fax the order to 513 891-6685. NCEPI's mailing address is Box 42419, Cincinnati, OH 45242. The URL for NCEPI's web site is <http://www.epa.gov/ncepihom/> -- here a search for documents can be made and orders placed on-line.

SUMMARY

Substandard USTs can cause serious environmental problems. In order to assist owners in preparing for the 1998 deadline, EPA and the states began an aggressive outreach program about three years ago. Information and seminars have been held in all Region 7 states.

During the first six months following the deadline, EPA will focus its federal inspection resources on:

- Federal Facilities,
- Owners and operators of multiple/large UST facilities; and
- Facilities that endanger sensitive ecosystems or sources of drinking water.

EPA will not focus its federal inspection resources on small UST facilities (generally four or fewer tanks), or USTs owned or operated by local or state governments.

Since 1988, many tank owners have made the financial commitments to upgrade, replace, or close their tanks. Industrial trade associations have also been supportive of 1998 UST standards and deadlines

For further information:

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